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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/386,965	08/31/1999	JUN-JIN KONG	Q55591	1967
7590 10/20/2004 SUGHRUE MION ZINN MACPEAK & SEAS PLLC 2100 PENNSYLVANIA AVENUE N W WASHINGTON, DC 200373202			EXAMINER PHU, PHUONG M	
			ART UNIT 2631	PAPER NUMBER

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/386,965

Applicant(s)

KONG ET AL.

Examiner

Phuong Phu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-9 and 13-40 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 10 and 12 is/are rejected.
- 7) ☒ Claim(s) 3 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. In view of the Appeal Brief filed on 8/19/04. PROSECUTION IS HEREBY REOPENED. Accordingly, a non-final Office Action is set forth below.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja et al (6,424,631) (previously cited), in view of Toskala (WO 97/363,378), newly cited.

As per claims 1 and 10, see figure 1B and 3, and col. 7, line 4 to col. 8, line 64, Czaja et al discloses a method and associated system comprising:

step/means (206, 320a,...,320d) for despreding data received at variable data rates and detecting quality information "hypothesis" of the despreded data received at the respective data rates; and

step/means (322) for estimating the rate of the received data based on the quality information of the despreded data at the respective data rates, wherein the despreded is performed without using Viterbi decoding.

Czaja et al does not disclose whether step/means (206, 320a,...,320d) is a decoding process.

However, spreading a signal into a spread-spectrum signal and despreding, in reverse, a spreaded signal are well-known in the art as spreading coding process and spreading decoding

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process, respectively. For instance, Toskala teaches that spreading a signal in a transmit site is a spreading coding process (451) in which the signal is coded by being spreaded with a PN code sequence to form a spread-spectrum spreaded signal; And accordingly, despreading a spread-spectrum spreaded signal in a receive site is a spreading decoding process (463) in which the spread-spectrum spreaded signal is decoded by being de-spreaded with a PN code sequence, replica of the PN code sequence at the corresponding transmit site in order to recover the signal (see figure 5, and pages 7-11).

Since Czaja et al does not disclose in detail how the spreading (106) and despreading (206) (see figures 1A and 1B) are implemented, therefore, for an application, it would have been obvious for one skilled in the art when building or carrying out Czaja et al method/system, to implemented Czaja et al spreading/despreading as the spreading coding/decoding, as taught by Toskala.

As per claim 2, Czaja et al, in view of Toskala, discloses that the despreading is performed using an inverse function "despreading" of generating function "spreading" used for coding<sup>3</sup> (see (106) of figure 1A and (206) of figure 1B).

As per claims 4 and 12, Czaja et al, in view of Toskala, discloses step/means (210) for Viterbi decoding only the data corresponding to the estimated data rate (see figure 1B).

***Allowable Subject Matter***

4. Claims 5-9 and 13-40 are allowed.
5. Claims 3 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Response to Arguments***

6. Applicant's arguments, filed on 8/19/04, with respect to the rejection(s) of claim(s) 1, 2, 4, 10 and 12 under 35 U.S.C. 102(e), as being anticipated by Czaja et al, have been fully considered. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as set forth above in this Office Action.

***Conclusion***

7. References (6,088,325), (6,560,448), (6,377,606), (6,388,615) and (6,678,315) are additionally cited because they are pertinent to the claimed method/system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong Phu 10/19/04*

Phuong Phu  
Primary Examiner  
Art Unit 2631

**PHUONG PHU  
PRIMARY EXAMINER**